

What is Claimed Is:

1. A network-enabled user interface device, the device including:  
a display screen configured for displaying display elements within respective distinct display areas;

a user input interface configured for supplying user inputs;

an application controller configured for obtaining display requests from executable application resources, the application controller including a network interface configured for receiving at least a portion of the display requests from a corresponding remote group of the executable application resources via an open protocol network; and

an interface controller configured for defining the distinct display areas and outputting the display elements for the respective distinct display areas, the interface controller including an arbitrator configured for selecting, from the display requests, the display element for each corresponding display area based on at least one of a corresponding determined condition and a determined presence of a selected one of the user inputs.

2. The device of claim 1, wherein the interface controller further includes, for each of the display areas, a corresponding display list having at least one corresponding display list entry for storage of an application object, the arbitrator configured for selecting, for each of the display areas, a corresponding one of the display list entries for display of the corresponding application object as the corresponding display element.

3. The device of claim 2, wherein the arbitrator is configured for reselecting the display list entry for display of the corresponding application object for a selected one of the display areas based on at least one of a user input, an application characteristic, and an event message.

4. The device of claim 3, wherein the interface controller further includes a display abstraction interface configured for generating display-specific images for display of the respective

display elements by the display screen.

5. The device of claim 3, wherein the arbitrator is configured for selectively adding each display list entry to the corresponding display list based on the corresponding application object.

6. The device of claim 5, wherein the arbitrator is configured for selecting the display list entry to be displayed, for an application object specified within one of the display requests, based on a determined class for the corresponding executable application resource.

7. The device of claim 6, wherein the arbitrator is configured for generating a new application object, representing a compilation of information from a selected group of the display requests, and adding a new display list entry containing the application object to a selected one of the display lists.

8. The device of claim 7, wherein the open protocol network is an Internet Protocol network.

9. The device of claim 3, wherein the application characteristic includes any one of a determined application service lifetime, a determined application class, and a specified priority within the display request.

10. The device of claim 3, wherein the arbitrator is configured for selectively deleting an identified display list entry based on at least one of the user input, the application characteristic, and the event message.

11. The device of claim 3, wherein the arbitrator is configured for generating a new application object, representing a compilation of information from a selected a group of the display requests, and adding a new display list entry containing the application object to a selected one of the display lists.

12. The device of claim 1, wherein the arbitrator is configured for selecting the display element for each corresponding display area based on parsing an extensible markup language (XML) document that specifies at least one rule for determining each selected display element.

13. A method of controlling a display screen of a network-enabled user interface device configured for network-based communications via an open protocol network, the method comprising:

receiving application-based display requests from executable application resources, at least a portion of the display requests received via an open protocol network;

selecting display elements to be displayed within respective distinct display areas of a display screen, based on arbitrating the display requests relative to at least one of a corresponding determined condition and a determined presence of a selected user input; and

outputting the display elements for display within the respective distinct display areas.

14. The method of claim 13, further comprising providing, for each of the display areas, a corresponding display list having at least one corresponding display list entry for storage of an application object, the selecting step including selecting, for each of the display areas, a corresponding one of the display list entries for display of the corresponding application object as the corresponding display element.

15. The method of claim 14, wherein the selecting step further includes reselecting the display list entry for display of the corresponding application object for a selected one of the display areas, based on at least one of a user input, an application characteristic, and an event message.

16. The method of claim 15, further comprising generating display-specific images for display of the respective display elements by the display screen.

17. The method of claim 15, wherein the providing step includes selectively adding each display list entry to the corresponding display list based on the corresponding application object.

18. The method of claim 17, wherein the selecting step includes selecting the display list entry to be displayed, for an application object specified within one of the display requests, based on a determined class for the corresponding executable application resource.

19. The method of claim 18, wherein the providing step includes generating a new application object, representing a compilation of information from a selected group of the display requests, and adding a new display list entry containing the application object to a selected one of the display lists.

20. The method of claim 19, wherein the open protocol network is an Internet Protocol network.

21. The method of claim 15, wherein the application characteristic includes any one of a determined application service lifetime, a determined application class, and a specified priority within the display request.

22. The method of claim 15, further comprising selectively deleting an identified display list entry based on at least one of the user input, the application characteristic, and the event message.

23. The method of claim 15, wherein the providing step includes generating a new application object, representing a compilation of information from a selected group of the display requests, and adding a new display list entry containing the application object to a selected one of the display lists.

24. The method of claim 13, wherein the selecting step includes parsing a selected XML document in response to at least one of a user input and the determined condition for selecting a corresponding display element to be displayed, the determined condition including reception of one of the display requests, and an event message.

25. A computer readable medium having stored thereon sequences of instructions for controlling a display screen of a network-enabled user interface device configured for network-based communications via an open protocol network, the sequences of instructions including instructions for performing the steps of:

5 receiving application-based display requests from executable application resources, at least a portion of the display requests received via an open protocol network;

selecting display elements to be displayed within respective distinct display areas of a display screen, based on arbitrating the display requests relative to at least one of a corresponding determined condition and a determined presence of a selected user input; and

10 outputting the display elements for display within the respective distinct display areas.

26. The medium of claim 25, further comprising instructions for performing the step of providing, for each of the display areas, a corresponding display list having at least one corresponding display list entry for storage of an application object, the selecting step including selecting, for each of the display areas, a corresponding one of the display list entries for display of the corresponding application object as the corresponding display element.

27. The medium of claim 26, wherein the selecting step further includes reselecting the display list entry for display of the corresponding application object for a selected one of the display areas, based on at least one of a user input, an application characteristic, and an event message.

28. The medium of claim 27, further comprising instructions for performing the step of generating display-specific images for display of the respective display elements by the display screen.

29. The medium of claim 26, wherein the providing step includes selectively adding each display list entry to the corresponding display list based on the corresponding application object.

30. The medium of claim 29, wherein the selecting step includes selecting the display list entry to be displayed, for an application object specified within one of the display requests, based on a determined class for the corresponding executable application resource.

31. The medium of claim 30, wherein the providing step includes generating a new application object, representing a compilation of information from a selected group of the display requests, and adding a new display list entry containing the application object to a selected one of the display lists.

32. The medium of claim 31, wherein the open protocol network is an Internet Protocol network.

33. The medium of claim 27, wherein the application characteristic includes any one of a determined application service lifetime, a determined application class, and a specified priority within the display request.

34. The medium of claim 27, further comprising instructions for performing the step of selectively deleting an identified display list entry based on at least one of the user input, the application characteristic, and the event message.

35. The medium of claim 27, wherein the providing step includes generating a new application object, representing a compilation of information from a selected group of the display requests, and adding a new display list entry containing the application object to a selected one of the display lists.

36. The medium of claim 25, wherein the selecting step includes parsing a selected XML document in response to at least one of a user input and the determined condition for selecting a corresponding display element to be displayed, the determined condition including reception of one of the display requests, and an event message.

37. A network-enabled user interface device having a display screen and configured for network-based communications via an open protocol network , the device comprising:

means for receiving application-based display requests from executable application resources, at least a portion of the display requests received via an open protocol network;

means for selecting display elements to be displayed within respective distinct display areas of a display screen, based on arbitrating the display requests relative to at least one of a corresponding determined condition and a determined presence of a selected user input; and

means for outputting the display elements for display within the respective distinct display areas.

38. The device of claim 37, wherein the selecting means is configured for providing, for each of the display areas, a corresponding display list having at least one corresponding display list entry for storage of an application object, the selecting means configured for selecting, for each of the display areas, a corresponding one of the display list entries for display of the corresponding application object as the corresponding display element.

39. The device of claim 38, wherein the selecting means is configured for reselecting the display list entry for display of the corresponding application object for a selected one of the display areas, based on at least one of a user input, an application characteristic, and an event message.

40. The device of claim 39, further comprising means for generating display-specific images for display of the respective display elements by the display screen.

41. The device of claim 39, wherein the selecting means is configured for selectively adding each display list entry to the corresponding display list based on the corresponding application object.

42. The device of claim 41, wherein the selecting means is configured for selecting the display list entry to be displayed, for an application object specified within one of the display requests, based on a determined class for the corresponding executable application resource.

43. The device of claim 42, wherein the selecting means is configured for generating a new application object, representing a compilation of information from a selected group of the display requests, and adding a new display list entry containing the application object to a selected one of the display lists.

44. The device of claim 43, wherein the open protocol network is an Internet Protocol network.

45. The device of claim 39, wherein the application characteristic includes any one of a determined application service lifetime, a determined application class, and a specified priority within the display request.



46. The device of claim 39, wherein the selecting means is configured for selectively deleting an identified display list entry based on at least one of the user input, the application characteristic, and the event message.

47. The device of claim 39, wherein the selecting means is configured for generating a new application object, representing a compilation of information from a selected group of the display requests, and adding a new display list entry containing the application object to a selected one of the display lists.

48. The device of claim 37, wherein the selecting means is configured for parsing a selected XML document in response to at least one of a user input and the determined condition for selecting a corresponding display element to be displayed, the determined condition including reception of one of the display requests, and an event message.

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